* SEEDS Technology Infusion

Process and Plans - Key Findings

Third SEEDS Public Workshop

Karen.Moe@gsfc.nasa.gov

Key Findings

- **Technology and Reuse**
  - Technology encompasses significant new advance over current practice (can be software, hardware, methods)
  - Reuse involves proven operational system (may be of varying levels of maturity) transferred to another domain/application/mission
  - Technology Infusion addresses the processes to off-set risk of first use
    - Maturation
    - Early adaptors
    - Incentives

Key Findings - Evolution Cycle

SEEDS Formulation

- ESE Strategic Goals
- ESE Vision, SEEDS Capabilities Vision
- Needs (capabilities, technology drivers)
- Technology development (inputs to tech dev programs)
- Gap analysis (determination of priority, timeline)
- Technology infusion
- Match-making
- Maturation
- Use
- Improvements/ evolving needs

Key Findings - Tailored Technology Infusion

SEEDS FORMULATION

- **Different strategies for different technology scope (wide to narrow use). Consider scope of infusion and tailor infusion processes (not one-size fits all)**
  - Significant common components (standards-based) affecting large/diverse user communities (shared infrastructure components & subsystems/ large scale need/ many users/ significant impact)
  - Specific to a large/focused ESE community (eg large scale computing)
  - Specific to a particular small/cohesive ESE community (eg MODIS tools)

Key Findings - Charter Recommendations

SEEDS FORMULATION

- Technology Infusion Working Group
- Purpose: Enable infusion of technologies into ESE systems in such a way as to ensure measurable, highly-innovative, cost-effective technology evolution (thus enabling NASA's ESE strategic goals). This is accomplished through:
  - Facilitating communicating between providers & consumers
  - Facilitating policy adherence
  - …
  - Identifying & defining technology infusion processes
  - Mapping Tech infusion strategies to ESE vision & strategies
  - Defining technology needs & gaps
  - …
  - Establishing incentives
  - Establishing metrics
  - …

SEEDS Technology Infusion Process: ESTO - SEEDS Interface

- Utilizes & extends current AIST processes for SEEDS